

INFORMATION DISCLOSURE
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ATTY. DOCKET NO.

160-410

CONTINUATION OF SERIAL NO.

10/229,067

APPLICANT

Nakamura et al

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FILING DATE

March 16, 2004

GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
TD	5,684,309	11/1997	McIntosh et al	257	14	
	4,862,471	8/1989	Pankove	372	45	
	5,646,953	7/1997	Naito et al	372	46	
	5,642,376	6/1997	Olbright et al	372	45	
	5,475,700	12/1995	Iwata	372	45	
	5,247,533	9/1993	Okazaki et al	372	42	
	5,959,307	9/1999	Nakamura et al	257	14	
	5,625,202	4/1886	Chai	257	81	
	5,739,554	4/1998	Edmond et al	257	103	
	5,693,963	12/1997	Fujimoto et al	257	94	
	6,121,638	9/2000	Rennie et al	257	103	
	5,557,115	9/1996	Shakuda	257	81	
	5,959,307	9/1999	Nakamura et al	257	14	
	5,679,965	10/1997	Schetzina	257	103	
	5,412,226	5/1995	Rejman-Greene et al	257	21	
	5,751,013	5/1998	Kidoguchi et al	257	13	
	5,689,123	11/1997	Major et al	257	190	
TD	6,005,258	12/1999	Manabe et al	257	13	
TD	5,247,533	9/1993	Okazaki et al	372	45	

FOREIGN PATENT DOCUMENTS

	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
TD	0 675 552 A1	10/1995	Europe				
	6-21511	1/1994	Japan				
	3-290984	4/1990	Japan				
	4-218994	8/1992	Japan				
	7-074431	3/1995	Japan				X
	61-156788	7/1986	Japan				X
	08/290218	10/1996	Japan				X
	6-268257	6/1994	Japan				X
	6-177423	6/1994	Japan				X
	7-235723	9/1995	Japan				
	4-68579	3/1992	Japan				
	4-242985	8/1992	Japan				
TD	6-177423	6/1994	Japan				
TD	6-21511	1/1994	Japan				

*Examiner Dr. [Signature] Date Considered 04/28/05

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GROUP

TD	6-237039	8/1994	Japan				
↓	7-297447	11/1995	Japan				
↓	6-232451	8/1994	Japan			X	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

TD	Narukawa et al Phys. Rev. B Vol. 55, No. 4, pp R1938-1941-1/97 Recombination dynamics of localized excitons in $\text{In}_{0.20}\text{Ga}_{0.80}\text{N-In}_{0.05}\text{Ga}_{0.95}\text{N}$ multiple quantum wells
	Narukawa et al Appl. Phys. Lett. 70 (8), pp 981-983, 2/1997 Role of self-formed InGaN quantum dots for exciton localization in the purple laser diode emitting at 420 nm
	Narukawa et al Appl. Phys. Lett., Vol. 74, No. 4 pp 558-560 1/99 Radioactive and nonradiative recombination processes in ultraviolet light-emitting diode composed of an $\text{In}_{0.02}\text{Ga}_{0.98}\text{N}$
	Nakamura et al Jpn. J. Appl. Phys., Vol. 35, pp L74-L76, Part 2, No. 1B, 1/96 InGaN-Based Multi-Quantum-Well Structure Laser Diodes
	Nakamura et al Jpn. J. Appl. Phys., Vol. 35 (1996), pp L217-220, Part 2, No. 2B, 2/96 InGaN Multi-Quantum-Well Structure Laser Diodes with Cleaved Mirror Cavity Facets:
	Nakamura et al Appl. Phys. Lett. 69 (11), pp. 1568-1570, 9/96 Optical gain and carrier lifetime of InGaN multi-quantum well structure laser diodes
	Jpn J. Appl. Phys. Vol. 34 (1995) pp. L1332-L1335, Part 2, No. 10B, 15 Oct. 1995, "Superbright Green InGaN Single-Quantum-Well-Structure Light-Emitting Diodes"
	Technical Report of IEICE, ED96-100, CPM96-78 (1996-10), pp. 15-21
↓	Technical Report of IEICE, ED96-110, CPM96-88 (1996-10), pp. 81-88
VP	Appl. Phys. Lett., 38 (11) June 1981 pp 835-837

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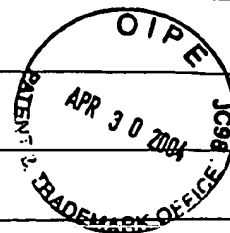
Filing Date

March 16, 2004

Serial No.

10/801,038

TC/A.U.



U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
TD	5,793,054	08/1998	NIDO			

FOREIGN PATENT DOCUMENTS

							TRANSLATION	
	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS		YES	NO
TD	JP 6-164085	06/1994	JAPAN				ABSTRACT	
	JP 6-268259	09/1994	JAPAN				ABSTRACT	
	JP 6-268257	09/1994	JAPAN				ABSTRACT	
	JP 7-249795	09/1995	JAPAN				ABSTRACT	
	JP 8-070139	03/1996	JAPAN				ABSTRACT	
	JP 9-191160	07/1997	JAPAN				ABSTRACT	
	JP 7-235729	09/1995	JAPAN				ABSTRACT	
	JP 9-148247	06/1997	JAPAN				ABSTRACT	
	JP 9-148678	06/1997	JAPAN				ABSTRACT	
	JP 6-164055	06/1994	JAPAN				ABSTRACT	
	JP 9-116225	05/1997	JAPAN				ABSTRACT	
	JP 8-064910	03/1996	JAPAN				ABSTRACT	
	JP 8-116128	05/1996	JAPAN				ABSTRACT	
	JP 9-129925	05/1997	JAPAN				ABSTRACT	
	JP 8-316581	11/1996	JAPAN				ABSTRACT	
	JP 9-129929	05/1997	JAPAN				X	
	805500 A1	11/1997	EP				X	
TD	JP 9-008412	01/1997	JAPAN					X

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

TD	AKASAKI et al., "Stimulated Emission by Current Injection from an AlGaIn/GaN/GaInN Quantum Well Device," Jpn. J. Appl. Phys., Vol. 34 (1995), pp. L1517-L1519
	NAKAMURA et al., "High-power InGaIn Single-Quantum-Well-Structure Blue and Violet Light-Emitting Diodes," Appl. Phys. Lett., Vol. 67, No. 13 (1995), pp. 1868-1870
	NAKAMURA et al., "Candela-Class High-Brightness InGaIn/AlGaIn Double-Heterostructure Blue-Light-Emitting Diodes," Appl. Phys. Lett. Vol. 63, No. 13 (1994), pp. 1687-1689
	NARUKAWA et al., "Recombination Dynamics of InGaIn Quantum Wells by Time-Resolved Photoluminescence," Technical Report of the Institute of Electronics, Information and Communication Engineers (Oct. 1996) (Japan), pp. 81-88
	WAKAHARA et al., "Growth of GaInN Alloy Layer and Its Composition Inhomogeneity," Technical Report of the Institute of Electronics, Information and Communication Engineers (Oct. 1996) (Japan), pp. 15-20
	NAKAMORI, T., "Unveiling the Structure of Pulse-Oscillate GaN Blue-Violet Semiconductor Laser," Nikkei Electronics (Jan. 1996) (Japan) No. 653, pp. 13-15
	NAKAMURA, S., "Development of Blue Device in Final Stage," Electronics (Feb. 1996) (Japan), pp. 1-3
TD	NAKAMURA, S., "Latest Progress in Nitride-Based Blue/Green LED and Semiconductor Laser," International Forum "Blue Light-Emission" Project of Hoso-Bunka Foundation, Inc. (May 1996) (Japan) pp. 53-60.

*Examiner	<i>2 Brown</i>	Date Considered	<i>4/28/05</i>
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